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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/724,907	12/01/2003	John R. Seiver	34116US (KDK)	3296

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EXAMINER	
KAPLAN, HAL IRA	

ART UNIT	PAPER NUMBER
2836	

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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/724,907

Applicant(s)

SEIVER, JOHN R.

Examiner

Hal I. Kaplan

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 11 June 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-20,22-24,26-28 and 36-42 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-20,22-24,26-28 and 36-42 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 01 December 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____
- ☒ Interview Summary (PTO-413)
Paper No(s)/Mail Date 20070605
- ☐ Notice of Informal Patent Application
- ☐ Other: _____

DETAILED ACTION

1. The Examiner would like to thank the Applicant for the time and courtesies extended in the in-person interview of June 5, 2007.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 1 and 26 are rejected under 35 U.S.C. 102(e) as being anticipated by the US patent of Verney et al. (5,422,517).

As to claims 1 and 26, Pan, drawn to value-based transmission asset maintenance management of electric power networks, discloses an electrical power system comprising: a plurality of generators (10,11); and a plurality of loads (15) that when summed, determine a total power consumed which is provided by the generators (10,11) (see column 3, lines 59-62 and the Figure). All of the loads use the same voltage since they are connected to the same bus; thus, the power produced is the voltage level of all of the loads (15) and thus of the largest load; and a bus electrically connecting each of the generators with each of the loads, wherein the bus is rated at less than the total power consumed (the total power required may exceed the nominal rated capacity of the generators (45 KVA), which exceeds the bus rating (15 KVA)) but carries all of the total power consumed from the generators to the loads without overloading the bus (see column 1, lines 20-27; column 3, lines 62-65; and the Figure).

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

6. Claims 2-20, 22-24, 28, and 40-42 are rejected under 35 U.S.C. 103(a) as being unpatentable over Verney in view of the US patent application publication of Pan et al. (2004/0158772).

As to claims 2-5 and 40, Verney discloses all of the claimed features, as set forth above, except for claimed generator and load connections. Pan discloses a power distribution system wherein each generator and each load is connected to a different point along the bus such that the total power consumed does not flow through any one point of the bus and is distributed without overloading the bus (see Figure 1). It would have been obvious to one of ordinary skill in the art, at the time of the invention, to have connected the generators and loads of Verney to the bus such that the total power

consumed does not flow through any one point of the bus and is distributed without overloading the bus, because the system will fail if the bus is overloaded.

As to claims 6-20 and 22, neither Verney nor Pan disclose the claimed values of voltages, currents, and power ratings. However, it would have been obvious to one of ordinary skill in the art, at the time of the invention, to have used the claimed voltage, current, and power rating values because selection of operational levels for an electronic system is an engineering decision based upon the system's intended use and the expected requirements of the other systems with which the system will interface. See MPEP §2144.04 IV(A).

In *Gardner v. TEC Systems, Inc.*, 725 F.2d 1338, 220 USPQ 777 (Fed. Cir. 1984), *cert. denied*, 469 U.S. 830, 225 USPQ 232 (1984), the Federal Circuit held that, where the only difference between the prior art and the claims was a recitation of relative dimensions of the claimed device, and a device having the claimed relative dimensions would not perform differently than the prior art device, the claimed device was not patentably distinct from the prior art device.

As to claim 28, a largest one of the loads (L1-L4) of Pan is connected directly to the bus without a transformer therebetween (see Figure 1).

As to claims 23, 24, and 42, the bus of Pan includes a current limiter (35r-35s, 40r-40s) electrically connected between the generators and the loads, thereby allowing the generators to share the loads while preventing a short circuit current rating of the bus from being exceeded (see Figure 1).

As to claim 41, the connections of the generators and motors (loads) in the system of Pan must be connected to the bus in compliance with Kirchhoff's current law.

7. Claim 27 is rejected under 35 U.S.C. 103(a) as being unpatentable over Verney in view of Pan as applied to claim 1 above, and further in view of the international patent application publication of Boenig (WO 98/09359).

As to claim 27, Verney in view of Pan disclose all of the claimed features, as set forth above, except for each generator being connected directly to the bus without a transformer therebetween. Boenig discloses generators (12,15) connected directly to a bus (11) without transformers therebetween (see Figure 1). It would have been obvious to one of ordinary skill in the art, at the time of the invention, to have built the system of Verney in view of Pan without transformers, or with converters other than transformers, to reduce the size and complexity of the system.

8. Claims 36-39 are rejected under 35 U.S.C. 103(a) as being unpatentable over Verney in view of Pan, and further in view of the US patent of Reijnen et al. (6,658,891).

As to claim 36, Verney in view of Pan disclose all of the claimed features, as set forth above, except for the claimed liquefied natural gas (LNG) facility. Reijnen, drawn to an offshore plant for liquefying natural gas, discloses a LNG facility comprising a plurality of compressors (65-67) to compress one or more refrigerants; a plurality of electric motors (83a,83b,113a,113b) to drive the compressors (65-67), wherein each motor contributes to the total power consumed and consumes power at a voltage level (see column 2, lines 17-18 and 49-52; column 3, lines 1-5; and column 4, lines 16-20). It would have been obvious to one of ordinary skill in the art, at the time of the invention,

to use the system of Verney in view of Pan to run the LNG facility of Reijnen, in order to produce more reliable power for the LNG facility.

As to claim 37, Pan discloses all of the claimed features, as set forth above, except for the claimed values of voltages, currents, and power ratings. However, it would have been obvious to one of ordinary skill in the art, at the time of the invention, to have used the claimed voltage, current, and power rating values because selection of operational levels for an electronic system is an engineering decision based upon the system's intended use and the expected requirements of the other systems with which the system will interface. See MPEP §2144.04 IV(A).

As to claim 38, Reijnen discloses a plurality of turbines fired by the natural gas to drive the generators (see column 1, lines 56-60).

As to claim 39, the bus of Pan includes a current limiter (35r-35s, 40r-40s) electrically connected between the generators and the loads, thereby allowing the generators to share the loads while preventing a short circuit current rating of the bus from being exceeded (see Figure 1).

Response to Arguments

9. Applicant's arguments with respect to claims 1 and 22 have been considered but are moot in view of the new ground(s) of rejection.

10. Applicant's arguments filed June 11, 2007, with respect to claim 40 have been fully considered but they are not persuasive. As to Applicant's argument that Pan provides no disclosure or suggestion that one would place the generators along the bus in a manner that will not overload any portion of the bus even when the bus is rated at

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less than the total power consumed by the loads, this feature is implicitly disclosed because the system implicitly has to be designed and assembled in some manner, and it would be obvious to one of ordinary skill in the art to design and assemble the system in a manner that will not overload any portion of the bus because the system, or a portion of the system, will fail to function properly if any portion of the bus is overloaded.

11. In response to applicant's argument that the references fail to show certain features of applicant's invention, it is noted that the features upon which applicant relies (i.e., the generators are connected to the bus without transformers) are not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993). In addition, the transformers (15a-c) of Pan are part of the generator power sources (10a-c) and not independent features.

Conclusion

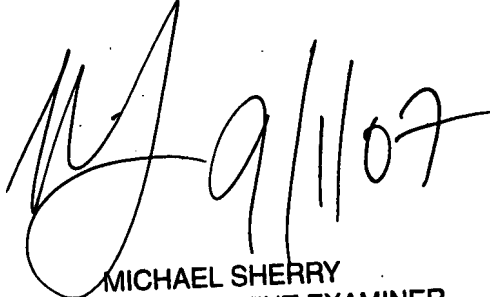
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Hal I. Kaplan whose telephone number is 571-272-8587. The examiner can normally be reached on M-F 8:30-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael Sherry can be reached on 571-272-2084. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

hik



MICHAEL SHERRY
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